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January 5, 2009

Commissioner for Patents
Office of Patent Publication
ATTN: Certificate of Corrections Branch
P.O. Box 1450
Alexandria, VA 22313-1450

Re: U.S. Patent No.: 7,465,355
Dated: December 16, 2008
For: METHOD AND DEVICE FOR PRODUCING MONOCRYSTALS
Our Ref.: Beaumont-39

Dear Sir:

Enclosed please find a Certificate of Correction for mistakes found in above-identified issued patent.

A marked copy of sections (54), (75) and (86) of the above-identified patent, showing the corrections is also provided for the convenience of the Office.

As these errors are the result of Office mistake, pursuant to 37 CFR 1.322, no fees are believed due and owing. The Commissioner is hereby authorized to charge any fees associated with this paper or credit any overpayments to Deposit Account No. 50-3208.

Respectfully submitted,



Edward J. Howard
Reg. No. 42,670
Attorney for Assignee

EJH/sjq
Enclosure

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 1 of 1

PATENT NO. : 7,465,355

APPLICATION NO.: 10/587,368

ISSUE DATE : December 16, 2008

INVENTOR(S) : Thierry Duffar, Annie Fournier-Gagnoud

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Section (54), line 1, change "Producing" to --Producing--.

Section (75), line 2, change "Grenoble" to --St. Ismier--.

Section (86), line 1, change "PCT/US2005/050055 to --PCT/FR2005/050055--.

MAILING ADDRESS OF SENDER (Please do not use customer number below):

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This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: **Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



US007465355B2

(12) **United States Patent**
Duffar et al.

(10) **Patent No.:** **US 7,465,355 B2**
 (45) **Date of Patent:** **Dec. 16, 2008**

Producing →
 St. Ismier

(54) **METHOD AND DEVICE FOR PRODUCING MONOCRYSTALS**

(75) Inventors: **Thierry Duffar, Grenoble (FR); Annie Fournier-Gagnond, Grenoble (FR)**

(73) Assignee: **Centre National de la Recherche Scientifique, Paris Cedex (FR)**

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **10/587,368**

(22) PCT Filed: **Jan. 28, 2005**

PCT/FR2005/050055

(86) PCT No.: **PCT/US2005/050055**

§ 371 (c)(1),

(2), (4) Date: **May 7, 2007**

(87) PCT Pub. No.: **WO2005/078166**

PCT Pub. Date: **Aug. 25, 2005**

(65) **Prior Publication Data**

US 2007/0277729 A1 Dec. 6, 2007

(30) **Foreign Application Priority Data**

Jan. 30, 2004 (FR) 0450177

(51) **Int. Cl.**

C30B 35/00 (2006.01)

C30B 11/02 (2006.01)

(52) **U.S. Cl.** 117/221; 117/81; 117/83; 117/219

(58) **Field of Classification Search** 117/81, 117/83, 219, 221

See application file for complete search history.

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(57) **ABSTRACT**

A device for manufacturing a single-crystal solid phase by solidification of a liquid phase, comprising: a crucible capable of containing the solid phase and the liquid phase, the liquid phase being in contact with the crucible and the solid phase being separated from the crucible by an interstice; and a heating mechanism for heating the liquid phase capable of creating a thermal gradient at the level of an interface between the liquid phase and the solid phase, electromagnetic field generation, distinct from the heating mechanism, for applying an electromagnetic pressure on the junction surface of the liquid phase at the level of the interface comprising at least one spiral surrounding the crucible, and placed opposite to the area in which the interface forms in operation.

4 Claims, 2 Drawing Sheets

